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- 12. (New) The drug composition of claim 10 wherein said dopaminergic agonist is selected from the group consisting of bromocriptine and biperiden.
- 13. (New) The drug composition of claim 12 wherein said second component is L-DOPA and at least one of bromocriptine or biperiden.
- 14. (New) The drug composition of claim 10 wherein at least one of said components is in galenical form.

15. (New) A method for improving the functionality of D1 and D2 dopaminergic receptors comprising administering over a long term period an effective dose of at least two drug components comprising as a first component nicotine or a nicotine derivative, and at least one second component selected from the group consisting of L-DOPA and dopaminergic agonists.

- 16. (New) The method of claim 15 as applied to a human mammal.
- 17. (New) The method of claim 16 wherein said long term period is at least about three months.

18. (New) The method of claim 17 wherein said D1 and D2 dopaminergic receptors are associated with neurodegenerative diseases.

- 19. (New) The method of claim 18 wherein said neurodegenerative diseases, are selected from the group consisting of Parkinson's disease and Tourette's syndrome.
- 20. (New) The method of claim 19 wherein said second component of said drug composition is L-DOPA.

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- 21. (New) The method of claim 20 wherein said second component of said drug composition is L-DOPA and at least one of bromocriptine or biperiden.
- 22. (New) The method of claim 17 wherein said drug composition is administered transdermally, subcutaneously, extracoporeally or orally.
- 23. (New) The method of claim 22 wherein at least one of said components is in galenical form.

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24. (New) The method of claim 20 wherein said at least first component is administered at a gradually increasing rate.

25. (New) The method of claim 24 wherein said gradually increasing rate is of from about 0.2 mg to about 5 mg per day per kilogram of body weight.

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26. (New) The method of claim 25 wherein at about the time the maximum rate of administration of said first component is reached, the effective dose of said L-DOPA is at least 30% lower than the effective dose when L-DOPA is administered in the absence of said first component.

27. (New) The method of claim 26 wherein the term of said long period is at least about four months.

28. (New) A method for treating a neurodegenerative disease in a human mammal comprising administering over a long term period an effective dose of at least two drug components comprising as a first component, nicotine or a nicotine derivative, and at least one second component selected from the group consisting of L-DOPA and dopaminergic agonists.

29. (New) The method of claim 28 wherein said long term period is at least about three months.

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30. (New) The method of claim 29 wherein said second component of said drug composition is L-DOPA.

31. (New) The method of claim 30 wherein said second component of said drug composition is L-DOPA and at least one of bromocriptine or biperiden.

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32. (New) The method of claim 31 wherein said treatment enables multiplication, stimulation and/or increase of nicotinergic receptors and pre-synaptic and post-synaptic D1 and D2 receptors in the nigrostriatum zone.

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33. (New) The method of claim 29 wherein said drug composition is administered transdermally, subcutaneously, extracoporeally or orally.

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34. (New) The method of claim 31 wherein at least one of said components is in galenical form.

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35. (New) The method of claim 30 wherein said at least first component is administered at a gradually increasing rate.

36. (New) The method of claim 35 wherein said gradually increasing rate is of from about 0.2 mg to about 5 mg per day per kilogram of body weight.

37. (New) The method of claim 36 wherein at about the time the maximum rate of administration of said first component is reached, the effective dose of said L-DOPA is at least 30% lower than the effective dose when L-DOPA is administered in the absence of said first component.

38. (New) The method of claim 37 wherein the term of said long period is at least about four months.

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